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WILDLIFE SERVICES—TEXAS

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USDA Resolves Wildlife Conflicts in Texas

Every day, residents, industries, organizations and agencies call on Texas Wildlife Services (WS) for help in protecting agriculture, human health and safety, natural resources, and property from damage or threats posed by wildlife. WS' professional wildlife biologists respond to these requests with effective, selective, and humane strategies to resolve wildlife conflicts. Texas is a diverse mix of urban and suburban areas, agricultural lands, forest and desert environments, and is home to over 22 million people. Texas ranks first with more farms (157,000) and farm acreage than any other state in the nation. At the same time, Texas has 24 cities with populations of 100,000 or more. The state also has a remarkable diverse range of wildlife species. This combination of wildlife and man and their associated conflicts makes the Texas WS program the largest wildlife damage management program in the United States. Each year the agency provides service on more than 5,500 properties covering nearly 20 million acres. The agency serves rural and urban areas with technical assistance, education, and direct assistance in wildlife damage management.

Applying Science & Expertise to Wildlife Challenges

WS offers information, advice, equipment, and materials that enable many people to resolve wildlife conflicts on their own. Often, this *technical assistance* can be provided over the phone. WS also provides on-site expertise, or *direct assistance,* to manage complex wildlife problems that cannot be safely or effectively resolved by others. To support this effort, WS conducts *scientific research* across the Nation to develop answers to new problems posed by wildlife and to ensure the program benefits from the latest science and technology.

Protecting Livestock—Historically, the Texas livestock industry has suffered livestock losses to predators such as coyotes, bobcats, lions, feral swine and eagles. In 2003, the National Agricultural Statistical Service

Top 5 Major Assistance Activities:
- Protecting livestock, wildlife, and exotics from predators
- Protecting public health from rabies and other zoonotic diseases
- Protecting civil and military aviation from wildlife strikes
- Protecting crops, timber, dikes, impoundments and property from beaver damage
- Protecting urban and rural homes and property from damage by wildlife

Top 5 WS Research Projects of Interest to Texas:
- Improving feral swine damage management methods and disease surveillance
- Skunk behavioral ecology in relation to future oral rabies vaccination programs
- Gray fox ecology in relation to oral rabies vaccination programs
- Uptake of fish meal and dog food polymer baits in gray fox
- Coyote immunocontraception and other wildlife fertility control studies

(NASS) reported that 110,000 sheep and goats, with a value of $10.9 million, were lost in Texas to predation. In 2001, NASS reported a loss of 24,800 cattle and calves valued at $8.8 million. These estimates for sheep and goats should be considered as conservative since these reflect only the losses the livestock owners reported after they had made an initial count of their lambs and kids. Also, if no control program were in place, research suggests losses could be two to three times higher. These predator related losses represent direct costs to the producer (i.e., value of the lost animal or value of lost wool and mohair), but other losses are also felt by producers, including the future value of associated animal products. The local rural economy also feels these losses indirectly through the reduced buying power of the ranchers and farmers. Research has indicated cost benefit ratios of 1:4 and 1:7 for wildlife damage management activities conducted by WS to protect the sheep and goat industry. Livestock protection is a major element of the Texas WS program.

Oral Rabies Vaccination Program—Two canine rabies epidemics emerged in Texas in 1988, one involving coyotes and dogs in southern Texas and the other in gray fox in central and western Texas. In 1994, the public health threat created by these two expanding epizootics prompted the Governor of Texas to declare rabies a public health emergency in Texas. In February 1995, the Texas State Department of Health Services initiated a cooperative program known as the oral rabies vaccination (ORV) program. Texas WS is a major contributor to this program, helping to deliver funds and distribute millions of oral baits by plane and helicopter every year.

The goal of the program is to create zones of vaccinated coyotes and gray foxes, and the project is proving to be highly successful. Canine rabies cases in southern Texas have declined from 122 reported in 1994; 142 in 1995; 20 in 1996; 6 in 1997; 5 in 1998; 10 in 1999; 0 in 2000; 1 in 2001; 0 in 2002 and 2003; and 1 reported in October 2004. The 2001 and 2004 cases were each within one-mile of the Rio Grande along the U.S. and Mexico border. Results from the surveillance program conducted after the 2004 bait drop showed 91 percent of the coyotes tested positive

for the biomarker that is indicative of bait acceptance and 56 percent developed an immune response to the vaccine.

The gray fox program has shown similar success with 244 cases reported in 1995; 101 in 1996; 124 in 1997; 36 in 1998; 66 in 1999; 58 in 2000; 20 in 2001; 65 in 2002; 61 in 2003; and 21 in 2004. Additionally, of foxes tested from the gray fox post-vaccination surveillance program in 2004, 53 percent were bait biomarker positive and 65 percent developed an immune response to the vaccine.

Protecting Human Health and Safety at Commercial and Military Airports—WS offers consultation and management assistance to commercial and military airports to assess wildlife conflicts at airports and improve safety by reducing hazards associated with wildlife. These biologists are trained and certified in the development of wildlife hazard assessments and wildlife hazard management plans.

Sheppard Air Force Base (AFB), Randolph AFB, and Laughlin AFB have all entered into agreements with WS providing funding for an airfield operations biologist at each facility. Wildlife/aircraft collisions disrupt the military mission and compromises air safety, risking lives in the air and on the ground. Hopefully, the efforts of these biologists will reduce the possibility of collisions between aircraft and wildlife at these facilities.

Wildlife management and habitat modification at airports can help eliminate or greatly reduce collisions between aircraft and birds or other wildlife. Problems with deer, rabbits, and coyotes on the runways were a few of the issues handled by WS in FY 2004 beyond the normal bird strikes, which accounts for 97 percent of all aircraft collisions.

More unusual, wildlife/airport conflicts include coyotes chewing through aircraft arrest barriers. These barriers are large nets of nylon webbing which serve to stop aircraft that run out of runway. Coyotes are also known to chew on electrical landing light cables along runways.

Protecting Multiple Resources—Many times a single wildlife species can damage multiple types of resources which may result in the need for varying wildlife damage management strategies. For example, blackbird problems at feedlots have to be handled differently than in situations where blackbirds are damaging rice or blackbird roosts are causing damage to trees or human health concerns. In FY 2004, Texas WS reported projects dealing with 690 different wildlife species/resource protected combinations that involved 124 different resources and 122 different wildlife species.

Protecting Multiple Resources from Beaver Damage—Texas WS continues to implement extensive measures to control damage to crops, timber, rangeland, other property, and various natural resources of Texas caused by the activities of beaver. The beaver's burrowing activities weaken earthen dams, highway foundations, dikes, and railroad track beds. Their dam building activities cause roadways, pastures, crops, and timber lands to flood by blocking water systems and plugging culverts. Their feeding activities result in the loss of trees and shrubs in urban, suburban, and rural situations and cause the destruction of water structures such as docks, piers, and house boats.

Protecting Multiple Resources from Feral Hog Damage—Feral hogs cause damage to field crops such as corn, milo, rice, watermelon, peanuts, hay, turf, wheat, and other grains by their feeding, trampling, and rooting activities. They also prey on lambs, kids, fawns, and ground nesting birds and compete with deer and turkey for limited resources such as mast and forage. Their rooting and wallowing activities damage pastures, spoil watering holes and generally weaken riparian habitats. They are destructive to livestock fences and may damage livestock and game feeders as well as consume and waste feed and mineral and protein blocks. Feral hogs are also a concern as a potential reservoir for numerous diseases and parasites. Populations of feral hogs in Texas are at two million and their range continues to expand to every part of the state.

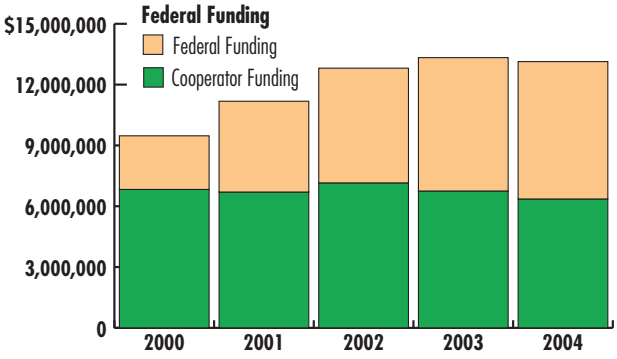
Protecting Pets and Other Companion Animals from Predation—Coyote predation on pets in urban and suburban areas is on the increase in Texas. Associated with these threats is also the fear that small children may be attacked by coyotes as occurred in Texas in 2004. Since coyotes are rarely confronted by humans in these urban and suburban areas, they lose their perception that humans are a threat and become bolder and more aggressive towards humans and their associated pets. In order to handle this increasing threat, city and county officials in Austin, Texas, entered into an agreement with WS to provide for an enhanced coyote control program within their urban and suburban areas.

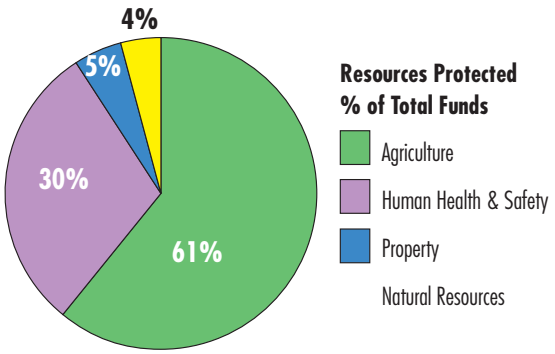
Looking to the Future

In Texas, feral hog damage management requests continue to increase each year as a result of the viability and range expansion of feral hogs and their adverse impacts on multiple resources. Additional funding will be required if WS' operational and research efforts can even begin to get a handle on this expanding resource problem.

Texas Wildlife Services Funding

In addition to receiving federally allocated funds, Texas WS also receives money from cooperators; such as producers; private individuals; businesses; and other Federal, State, and local government agencies who have a vested interest in the program. In most cases, these cooperators need help to resolve wildlife damage problems, or they play a role in wildlife damage management.





Major Cooperators

- Texas Cooperative Extension, Texas A&M University System
- Texas Department of State Health Services
- Texas Wildlife Damage Management Association
- Sheppard Air Force Base
- Laughlin Air Force Base
- Randolph Air Force Base